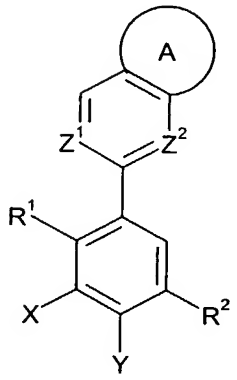
CLAIMS

1. A compound of formula (I):




(I)

wherein

A is a fused 5-membered heteroaryl ring containing one or two heteroatoms independently selected from oxygen and nitrogen which heteroaryl ring is optionally substituted by up to two substituents independently selected from $C_{1-6}$alkyl, -$(CH_2)_k$-$C_{3-7}$cycloalkyl, halogen, cyano, trifluoromethyl, -$(CH_2)_kOR^3$, -$(CH_2)_kCO_2R^3$, -$(CH_2)_kNR^3R^4$, -$(CH_2)_kCONR^3R^4$, -$(CH_2)_kNHCOR^3$, -$(CH_2)_kSO_2NR^3R^4$, -$(CH_2)_kNHSO_2R^3$, -$(CH_2)_kSO_2(CH_2)_mR^5$, a 5- or 6-membered heterocyclyl ring containing nitrogen optionally substituted by $C_{1-2}$alkyl or -$(CH_2)_kCO_2R^3$, and a 5-membered heteroaryl ring optionally substituted by $C_{1-2}$alkyl;

A is a fused 5-membered heteroaryl ring containing one or two heteroatoms independently selected from oxygen and nitrogen which heteroaryl ring is substituted by -$BR^6$, and

the heteroaryl ring is optionally further substituted by one substituent selected from -$OR^7$, halogen, trifluoromethyl, -CN, -$CO_2R^7$ and $C_{1-6}$alkyl optionally substituted by hydroxy;

A is a fused 5-membered heteroaryl ring containing one or two heteroatoms independently selected from oxygen and nitrogen which heteroaryl ring is substituted by -$(CH_2)_n$heterocyclyl wherein the heterocyclyl is a 5- or 6-membered heterocyclic ring containing one or two heteroatoms independently selected from oxygen, sulfur and nitrogen optionally substituted by up to two substituents independently selected from oxo, $C_{1-6}$alkyl, -$(CH_2)_p$phenyl, -$OR^7$, -$(CH_2)_pCO_2R^7$, -$NR^7R^8$ and -$CONR^7R^8$, and

the heteroaryl ring is optionally further substituted by one substituent selected from -$OR^7$, halogen, trifluoromethyl, -CN, -$CO_2R^7$ and $C_{1-6}$alkyl optionally substituted by hydroxy; or

A is a fused 5-membered heteroaryl ring containing one or two heteroatoms independently selected from oxygen and nitrogen which heteroaryl ring is substituted by -$(CH_2)_q$aryl or -$(CH_2)_q$heteroaryl wherein the aryl or heteroaryl is optionally substituted by one or more substituents independently selected from oxo, $C_{1-6}$alkyl, halogen, cyano,

trifluoromethyl, $-OR^9$, $-(CH_2)_rCO_2R^{10}$, $-NR^9R^{10}$, $-(CH_2)_rCONR^9R^{10}$, $-NHCOR^9$, $-SO_2NR^9R^{10}$, $-NHSO_2R^9$ and $-S(O)_sR^9$, and

the heteroaryl ring is optionally further substituted by one substituent selected from $-OR^7$, halogen, trifluoromethyl, -CN, $-CO_2R^7$ and $C_{1-6}$alkyl optionally substituted by hydroxy;

$R^1$ is selected from methyl and chloro;

$R^2$ is selected from $-NH-CO-R^{11}$ and $-CO-NH-(CH_2)_t-R^{12}$;

$R^3$ is selected from hydrogen, $C_{1-6}$alkyl optionally substituted by up to two OH groups, $-(CH_2)_k-C_{3-7}$cycloalkyl, $-(CH_2)_k$phenyl optionally substituted by $R^{13}$ and/or $R^{14}$ and $-(CH_2)_k$heteroaryl optionally substituted by $R^{13}$ and/or $R^{14}$,

$R^4$ is selected from hydrogen and $C_{1-6}$alkyl, or

$R^3$ and $R^4$, together with the nitrogen atom to which they are bound, form a 5- or 6-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and $N-R^{15}$;

$R^5$ is selected from $C_{1-6}$alkyl optionally substituted by up to three halogen atoms, $C_{2-6}$alkenyl optionally substituted by phenyl, $C_{3-7}$cycloalkyl, heteroaryl optionally substituted by up to three $R^{13}$ and/or $R^{14}$ groups, and phenyl optionally substituted by $R^{13}$ and/or $R^{14}$;

$R^6$ is a $C_{3-6}$alkyl group substituted by at least two substituents independently selected from $-OR^{16}$, $-NR^{16}R^{17}$, $-CO_2R^{16}$, $-CONR^{16}R^{17}$, $-NHCOR^{16}$ and $-NHSO_2R^{16}$;

$R^7$ and $R^8$ are each independently selected from hydrogen and $C_{1-6}$alkyl;

$R^9$ is selected from hydrogen, $-(CH_2)_u-C_{3-7}$cycloalkyl, $-(CH_2)_u$heterocyclyl, $-(CH_2)_u$aryl, and $C_{1-6}$alkyl optionally substituted by up to two substituents independently selected from $-OR^{18}$ and $-NR^{18}R^{19}$,

$R^{10}$ is selected from hydrogen and $C_{1-6}$alkyl, or

$R^9$ and $R^{10}$, together with the nitrogen atom to which they are bound, form a 5- or 6-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and $N-R^{15}$;

$R^{11}$ is selected from hydrogen, $C_{1-6}$alkyl, $-(CH_2)_t-C_{3-7}$cycloalkyl, trifluoromethyl, $-(CH_2)_v$heteroaryl optionally substituted by $R^{20}$ and/or $R^{21}$, and $-(CH_2)_v$phenyl optionally substituted by $R^{20}$ and/or $R^{21}$;

$R^{12}$ is selected from hydrogen, $C_{1-6}$alkyl, $C_{3-7}$cycloalkyl, $-CONHR^{22}$, phenyl optionally substituted by $R^{20}$ and/or $R^{21}$, and heteroaryl optionally substituted by $R^{20}$ and/or $R^{21}$;

$R^{13}$ and $R^{14}$ are each independently selected from halogen, cyano, trifluoromethyl, nitro, $C_{1-6}$alkyl, $C_{1-6}$alkoxy, $-CONR^{22}R^{23}$, $-COR^{24}$, $-CO_2R^{24}$, and heteroaryl, or

$R^{13}$ and $R^{14}$ are linked to form a fused 5-membered heterocyclyl ring containing one heteroatom selected from oxygen, sulfur and $N-R^{15}$, or a fused heteroaryl ring;

$R^{15}$ is selected from hydrogen and methyl;

$R^{16}$, $R^{17}$, $R^{18}$ and $R^{19}$ are each independently selected from hydrogen and $C_{1-6}$alkyl;

$R^{20}$ is selected from $C_{1-6}$alkyl, $C_{1-6}$alkoxy, $-(CH_2)_t-C_{3-7}$cycloalkyl, $-CONR^{22}R^{23}$, $-NHCOR^{23}$, halogen, -CN, $-(CH_2)_wNR^{25}R^{26}$, trifluoromethyl, phenyl optionally substituted by one or more $R^{21}$ groups, and heteroaryl optionally substituted by one or more $R^{21}$ groups;

$R^{21}$ is selected from $C_{1-6}$alkyl, $C_{1-6}$alkoxy, halogen, trifluoromethyl, and -$(CH_2)_wNR^{25}R^{26}$;

$R^{22}$ and $R^{23}$ are each independently selected from hydrogen and $C_{1-6}$alkyl, or

$R^{22}$ and $R^{23}$, together with the nitrogen atom to which they are bound, form a 5- or 6-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-$R^{15}$, wherein the ring may be substituted by up to two $C_{1-6}$alkyl groups;

$R^{24}$ is $C_{1-6}$alkyl;

$R^{25}$ is selected from hydrogen, $C_{1-6}$alkyl and -$(CH_2)_t$-$C_{3-7}$cycloalkyl optionally substituted by $C_{1-6}$alkyl,

$R^{26}$ is selected from hydrogen and $C_{1-6}$alkyl, or

$R^{25}$ and $R^{26}$, together with the nitrogen atom to which they are bound, form a 5- or 6-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-$R^{15}$;

B is selected from a bond, oxygen, NH and $S(O)_x$;

X and Y are each independently selected from hydrogen, methyl and halogen;

$Z^1$ is N or N=O and $Z^2$ is CH,

$Z^1$ is CH and $Z^2$ is N or N=O, or

$Z^1$ and $Z^2$ are each independently selected from N or N=O;

k, m and w are each independently selected from 0, 1, 2 and 3;

n, q, r, s, t and x are each independently selected from 0, 1 and 2; and

u and v are each independently selected from 0 and 1;

or a pharmaceutically acceptable derivative thereof.

2. A compound according to claim 1 wherein A is a 5-membered heteroaryl ring containing two heteroatoms independently selected from oxygen and nitrogen.

3. A compound according to claim 1 or claim 2 wherein A is substituted by up to two substituents independently selected from $C_{1-4}$alkyl, halogen, -$(CH_2)_kNR^3R^4$, -$(CH_2)_kNHCOR^3$, -$(CH_2)_kNHSO_2R^3$ and -$(CH_2)_kSO_2(CH_2)_mR^5$, or A is substituted by -$(CH_2)_q$aryl wherein the aryl is optionally substituted by one or two substituents independently selected from $C_{1-6}$alkyl, halogen, cyano, -$OR^9$ and -$(CH_2)_rCO_2R^{10}$.

4. A compound according to any one of the preceding claims wherein A is substituted by -$(CH_2)_kSO_2(CH_2)_mR^5$ or -$(CH_2)_q$aryl wherein the aryl is substituted by $C_{1-6}$alkyl or halogen.

5. A compound according to any one of the preceding claims wherein $R^1$ is methyl.

6. A compound according to any one of the preceding claims wherein $R^2$ is -CO-NH-$(CH_2)_t$-$R^{12}$.

7. A compound according to any one of the preceding claims wherein X is hydrogen or fluorine.

8. A compound according to claim 1 substantially as hereinbefore defined with reference to any one of Examples 1 to 58, or a pharmaceutically acceptable derivative thereof.

9. A compound selected from:
*N*-cyclopropyl-4-methyl-3-{1-[(1-methylethyl)sulfonyl]-1*H*-pyrazolo[3,4-*c*]pyridin-5-yl}benzamide;
*N*-cyclopropyl-4-methyl-5-[1-(2-thienylsulfonyl)-1*H*-pyrazolo[3,4-*c*]pyridin-5-yl]benzamide;
*N*-cyclopropyl-3-fluoro-4-methyl-5-[1-(2-thienylsulfonyl)-1*H*-pyrazolo[3,4-*c*]pyridin-5-yl]benzamide;
*N*-cyclopropyl-3-[1-(cyclopropylsulfonyl)-1*H*-pyrazolo[3,4-*c*]pyridin-5-yl]-5-fluoro-4-methylbenzamide;
*N*-cyclopropyl-3-fluoro-4-methyl-5-[1-(3-methylphenyl)-1*H*-pyrazolo[3,4-*c*]pyridin-5-yl]benzamide;
*N*-cyclopropyl-4-methyl-5-(1-phenyl-1*H*-pyrazolo[3,4-*c*]pyridin-5-yl)benzamide;
*N*-cyclopropyl-3-[1-(2-fluorophenyl)-1*H*-pyrazolo[3,4-*c*]pyridin-5-yl]-4-methylbenzamide;
*N*-cyclopropyl-3-fluoro-5-[3-(4-fluorophenyl)-1*H*-pyrazolo[3,4-*b*]pyridin-6-yl]-4-methylbenzamide;
3-fluoro-5-[3-(4-fluorophenyl)-1*H*-pyrazolo[3,4-*b*]pyridin-6-yl]-4-methyl-*N*-(1-methyl-1*H*-pyrazol-5-yl)benzamide;
3-fluoro-5-[3-(4-fluorophenyl)-1*H*-pyrazolo[4,3-*c*]pyridin-6-yl]-4-methyl-*N*-(1-methyl-1*H*-pyrazol-5-yl)benzamide;
3-[3-(acetylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-6-yl]-*N*-cyclopropyl-4-methylbenzamide;
*N*-cyclopropyl-4-methyl-3-{3-[(2-methylpropanoyl)amino]-1*H*-pyrazolo[3,4-*b*]pyridin-6-yl}benzamide;
*N*-cyclopropyl-4-methyl-3-[3-(propanoylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-6-yl]benzamide;
and
*N*-(6-{5-[(cyclopropylamino)carbonyl]-2-methylphenyl}-1*H*-pyrazolo[3,4-*b*]pyridin-3-yl)-2-thiophenecarboxamide;
or a pharmaceutically acceptable derivative thereof.

10. A pharmaceutical composition comprising at least one compound as claimed in any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, in association with one or more pharmaceutically acceptable excipients, diluents and/or carriers.

11. A compound according to any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, for use in therapy.

12. A compound as claimed in any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, for use in the treatment or prophylaxis of a condition or disease state

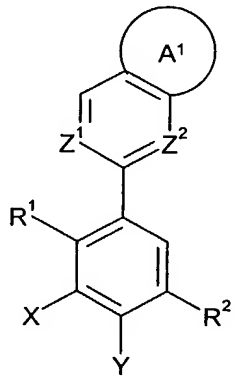
mediated by p38 kinase activity or mediated by cytokines produced by the activity of p38 kinase.

13. A method for treating a condition or disease state mediated by p38 kinase activity or mediated by cytokines produced by the activity of p38 kinase comprising administering to a patient in need thereof a compound as claimed in any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof.

14. Use of a compound as claimed in any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, in the manufacture of a medicament for use in the treatment of a condition or disease state mediated by p38 kinase activity or mediated by cytokines produced by the activity of p38 kinase.

15. A process for preparing a compound of formula (I) as claimed in any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, which comprises

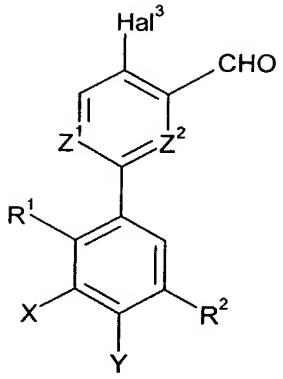
(a) reacting a compound of formula (II)




(II)

in which $R^1$, $R^2$, X, Y, $Z^1$ and $Z^2$ are as defined in claim 1 and $A^1$ is an unsubstituted fused 5-membered heteroaryl ring containing one or two heteroatoms independently selected from oxygen and nitrogen with a halide derivative,
in the presence of a base;

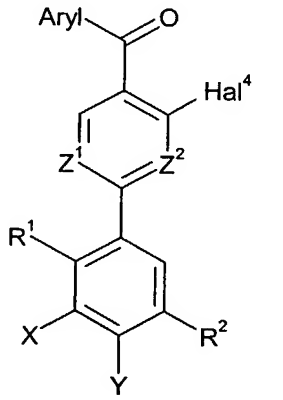
(b) when A is a fused pyrazolyl, reacting a compound of formula (XI)




(XI)

in which $R^1$, $R^2$, X, Y, $Z^1$ and $Z^2$ are as hereinbefore defined and $Hal^3$ is halogen, in particular chlorine, with a hydrazine derivative;

(c) when A is a fused pyrazolyl substituted by aryl, reacting a compound of formula (XII)




(XII)

in which $R^1$, $R^2$, X, Y, $Z^1$ and $Z^2$ are as hereinbefore defined and $Hal^4$ is halogen, in particular chlorine, with a hydrazine derivative; or

(d) final stage modification of one compound of formula (I) as defined in claim 1 to give another compound of formula (I) as defined in claim 1.